

**REMARKS**

Claims 1-8 are all the claims pending in the present application. Claims 1-7 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Oouchi (U.S. Patent No. 6,175,791), hereinafter referred to as Oouchi '791, in view of Oouchi (U.S. Patent No. 6,356,207), hereinafter referred to as Oouchi '207, and further in view of Imura et al. (U.S. Patent No. 5,909,653). Claim 8 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Oouchi '791 in view of Oouchi '207, further in view of Imura, and further in view of Chatzipetros et al. (U.S. Patent Application Publication No. 2002/0047810).

**§ 103(a) Rejections (Oouchi '791/ Oouchi '207/ Imura) – Claims 1-7**

Claims 1-7 are rejected based on the reasons set forth on pages 3-8 of the present Office Action. Applicant traverses these rejections, at least based on the following reasons.

With respect to claim 1, Applicant submits that the applied references, either alone or in combination, do not disclose or suggest at least:

a) “a mounting member for mounting said antenna array at a predetermined location of said motor vehicle,”

b) “antenna angle holding means mounted swingably on said mounting member for holding the angle of said antenna array relative to the horizontal plane of said motor vehicle within a predetermined range of angle,” and

c) “wherein said antenna angle holding means is designed to set said predetermined range of angle such that a proper angle can be ensured for enabling intercommunication between said on-road equipment and said antenna array within said predetermined communication area,” as recited in claim 1.

With respect to feature “a” above, the Examiner acknowledges that Oouchi ‘207 and Oouchi ‘791 fail to teach this feature. However, the Examiner alleges that Imura satisfies the feature in “a” above. Specifically, the Examiner states:

Imura et al. also discloses an antenna support mechanism that can be rotated such that the antenna moves away from the front surface, i.e., in the direction of the rear surface, the tip of the antenna describing an arc of  $\theta$  degrees from the vertical position (Fig. 1; col. 3, lines 8-12). When the rotation of the antenna reaches a prescribed angle sufficiently inclined with respect to the front surface of the case, the antenna support mechanism rigidly locks the antenna with respect to the case (Fig. 1; col. 3, lines 13-16).

Further, the Examiner alleges, “In the same filed of endeavor, Imura et al. shows and discloses, as known in the art, a radio device that comprises an antenna that is supported on the upper surface of the case by an antenna support mechanism (Fig. 1; col. 3, lines 5-7).”

In response, Applicant submits that Imura only shows a radio device that comprises an antenna that is supported on a case of the radio device, however there is no teaching or suggestion of a mounting member for mounting the antenna array at a predetermined location of a motor vehicle.

With respect to feature “b” above, even though Imura discloses that an antenna can be rotated in an arc of a particular degree from a vertical position, and can be held at a particular position that the antenna is rotated to, there is no disclosure or suggestion of holding the angle of an antenna array relative to a horizontal plane of a motor vehicle within a predetermined range of angle. Moreover, there is no mention of any particular predetermined range or angle in Imura.

Finally, with respect to feature “c,” as indicated above, there is no mention of a holding means for holding an antenna at a predetermined range of angle, therefore, clearly the antenna angle holding means cannot be designed to set a predetermined range of angle such that a proper angle can

be insured for enabling intercommunications between an on-road equipment and an antenna array within a predetermined communication area.

At least because the specific features above are not satisfied by the applied references, Applicant submits that claim 1 is patentably distinguishable over the applied references, either alone or in combination.

Applicant submits that dependent claims 2-7 are patentable at least by virtue of their dependency from independent claim 1.

Further, with respect to claim 3, Applicant submits that none of the applied references, either alone or in combination, discloses or suggests at least, “wherein said balance member has a weight attached at least one location of said balance member,” as recited in claim 3. It is quite confusing what the Examiner believes corresponds to the specific features in claim 3. For example, there is no clear indication of what the Examiner believes corresponds to the balance member, the antenna angle holding means that is constituted by the balance member, and the weight that is attached to at least one location on the balance member. Therefore, since the Examiner has not established a prima facie case that each and every claim features is satisfied by the applied references, Applicant submits that dependent claim 3 is patentably distinguishable over the applied references.

With respect to claim 4, Applicant submits that the applied references do not disclose or suggest at least, “wherein said weight is made of a metal having electrical conductivity and connected to a grounding terminal of said antenna array,” as recited in claim 4. The Examiner believes that the antenna element in Imura that is composed of a metal rod corresponds to the claimed weight. However, as described in the claim, the weight is attached to a balance member. The metal rod in Imura constitutes the antenna in Imura, however, there is no mention that the metal rod, which allegedly corresponds to the weight, is attached to a balance member. Again, the

Examiner appears to be confusing the different elements that allegedly correspond to the claimed elements.

Further, with respect to claim 5, Applicant submits that none of the prior references, either alone or in combination, disclose or suggest at least, “a rotation angle limiting mechanism for limiting a rotation angle range of said balance member relative to said mounting member,” as recited in claim 5. Imura only discloses that an antenna can be held at a particular position, however there is no teaching or suggestion that a particular rotation angle range of a balance member is limited relative to a mounting member. The antenna position in Imura can be changed to different positions and held at different prescribed angles, but there is no mention of limiting the rotation of the antenna. Further, as indicated above, there is no clear indication of what the Examiner believes is the balance member, and clearly there is no mention of limiting a rotation angle range of a balance member relative to a mounting member.

Further, with respect to claim 6, Applicant submits that none of the applied references disclose or suggest at least, “wherein said mounting member is constituted by said main body of said on-vehicle DSRC apparatus,” as recited in claim 6. As indicated above, with respect to claim 1, there is no mounting member in Imura for mounting said antenna array at a predetermined location of the motor vehicle. Therefore, clearly, since there is no mounting member, there is no mounting member constituted by the main body of an on-vehicle DSRC apparatus.

At least based on the foregoing, Applicant submits that claims 1-7 are patentably distinguishable over the applied references, either alone or in combination.

§ 103(a) Rejection (Oouchi '791/ Oouchi '207/ Imura/ Chatzipetros – Claim 8

Applicant submits that claim 8 is patentable at least by virtue of its dependency from independent claim 1. Chatzipetros does not make up for the deficiencies of the other applied references.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

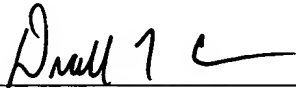
Respectfully submitted,

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

  
Diallo T. Crenshaw  
Registration No. 52,778

Date: November 21, 2006